



#### 1<sup>ST</sup> ANNUAL EPA OECA GRANT CONFERENCE

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# PANEL #1A: COMPLIANCE ASSISTANCE/OUTCOMEPERFORMANCE MEASUREMENT

#### Presented by

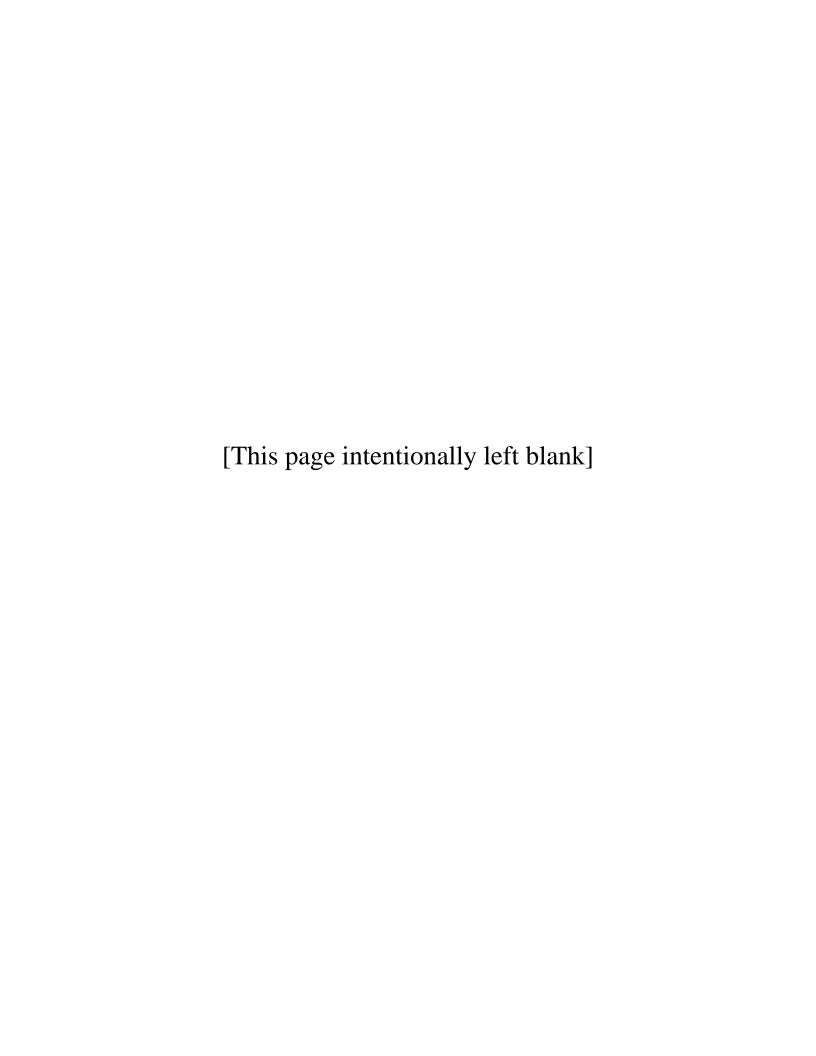
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# Analysis of the Impact of Outreach on Compliance with the Chrome Plating Rule

Steve Eve and Hardip Judge California Air Resources Board





#### Analysis of the Impact of Outreach on Compliance

The objective of the study was to develop and implement enhanced performance measures for state enforcement and compliance assurance programs. In addition, we wanted to elevate the state of compliance of inspected facilities and determine the effect of assistance and outreach on compliance. For purposes of this study, the rule category selected was chrome plating. Inspected facilities were located in the South Coast Air Basin in California.

The study essentially involved a thorough examination of the chrome plating industry with respect to rule implementation in the South Coast Air Basin. Inspections were conducted to determine the baseline compliance rate. Permitting, training, enforcement, and outreach activities were then conducted. Subsequent inspections (after three years) revealed that the compliance rate for this population increased from 23% to 80%. We believe that a combination of increased inspection frequency, compliance assistance activities, and vigorous enforcement (where needed) contributed to this substantial improvement.

The chrome plating industry was selected because their compliance rates have historically been lower than desired and there are environmental justice considerations based on their location. Unless compliance rates are improved for this rule category, Low Income Communities situated near these toxic emitters may continue to be disproportionately impacted.

This type of study is resource intensive, requires coordination, and is not suitable for source categories with very small populations. This model is well suited for area sources such as gasoline dispensing facilities and dry cleaners.

For more information on this project, contact Hardip Judge (<u>hjudge@arb.ca.gov</u>) or Steve Eve (seve@arb.ca.gov).

#### Cal/EPA Air Resources Board

#### Analysis of the Impact of Outreach on Compliance With the Chrome Plating Rule

Presented by Steve Eve & Hardip Judge Stationary Source Division

#### Notes

- Steve Eve is an air pollution specialist with the California Air Resources Board of Cal EPA. His supervisor is Hardip Judge.
- Cal EPA is comprised of six boards, departments and offices.

#### California Regulatory Structure

#### CAL/EPA has 6 BDOs

■CARB \*
■CIWMB
■DTSC
■OEHHA

■SWRCB

■DPR

Solid Waste Toxics Health Risk Water Pesticides

\* has oversight authority over 35 local air districts

#### Notes

 California Air Resources Board (CARB) has oversight over 35 local air districts, including the South Coast Air Quality Management District.

#### **Project Summary**

- Conduct inspections of chrome platers in the South Coast Air Basin
- ⇒ Establish baseline compliance rates
- Conduct outreach activities
- ⇒Inspections after 3 years
- ⇒Analyze impact of outreach

#### Project Outputs / Outcomes

- ⇒ #1: To determine the number of sources & percent of sources to be inspected (NPMS Output Set 8)
- ⇒ #2: To determine the level of compliance in the regulated population (NPMS Outcome Set 1)
- #3: To determine the number of notices issued & enforcement actions initiated & concluded for each study (NPMS Output Set 9)
- ⇒ #4: To determine the response of significant violators, i.e., the average number of days for violators to return to compliance (NPMS Outcome Set 6)

#### Notes

• Our project addressed 6 Outputs and Outcomes.

### Project Outputs / Outcomes (Continued)

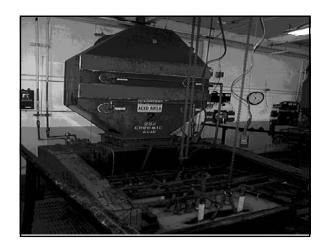
- ⇒#5: To determine the long term response of significant violators within two years of receiving an enforcement action (NPMS Outcome Set 7)
- ⇒#6: To determine the environmental improvements by regulated entities. Specifically, improvements resulting from enforcement action and/or compliance assistance tools and initiatives. (NPMS Outcome Set 2 & 3)

#### Notes

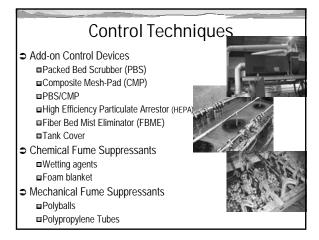
#### Why Chrome Platers?

- ⇒ Compliance rates are low
- ⇒ Exposure risks are high
- ⇒ Environmental justice considerations
- Many platers are small businesses

- Why did we chose chrome platers?
- An air toxics study was conducted in 1993-1994. We looked at chrome platers, cooling towers, ethylene oxide sterilizers, and medical waste incinerators statewide. That study showed that in CA, chrome platers had the highest non-compliance problems of all four categories.

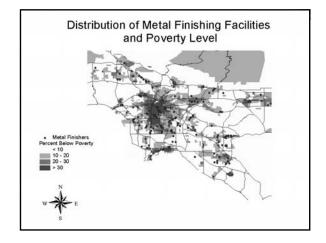


# Notes



#### Notes

 Control techniques are designed to minimize the amount of hexavalent chromium emitted to the atmosphere. They range from add-on control devices to chemical fume suppressants.



- The map shows metal finishers; the orange and brown areas are low income areas.
- You can see the high concentration of finishers in some areas.

#### **Project Strengths**

- ⇒ Relevant will yield valuable data on critical outcome measures.
- ⇒ Transparent goals clear to regulators, business owners and public interest groups.
- ⇒ Credible data from actual field studies.

# Notes

#### Project Strengths

(continued)

- ⇒ Feasible costs not disproportionate to value of findings.
- ⇒ Functional generate required data and also elevate compliance rate of category under study.

#### Notes

#### Benefits

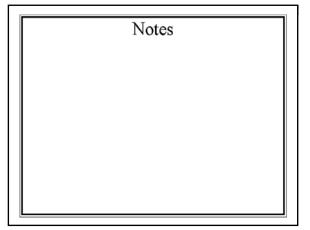
- ⇒Determine compliance status of this category
- ⇒Develop and implement enhanced performance measures
- Realize a permanent elevated state of compliance for this category

#### Notes

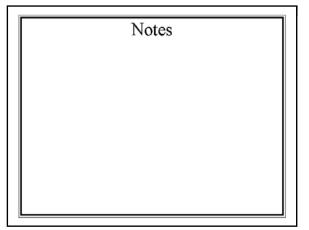
• The compliance status of this category is particularly important to regulators so they can see if they're getting results.

#### Important Data Elements

- ⇒ General Information□(Rule Enforceability, Permits, Inspections)
- Outputs Category□(Enforcement & Compliance Assurance Activities)
- Outcomes Category□(Effects on Behavior of Regulated Populations)







#### **General Information**

- ⇒ Rule enforceability
- ⇒Quality of issued permits
- ⇒Frequency of inspections

- SC rule 1469 is enforceable.
- Many permits were outdated.
- Inspection frequency was every 2 years.

#### **Outputs Category**

(Enforcement & Compliance Assurance Activities)

#1 Number of Sources & % of Sources Inspected

- ⇒ Performance Objective (Statistical Validity)
  - ■Sample size to ensure that a 5% margin of error will be achieved with a 95% confidence level: (131 / 171) = 77%
- Stratified sampling
  - Decorative Chrome (77) / Hard Chrome (54)
- ⇒ Safeguards against bias
  - ■Random selection of sources
  - Unannounced inspections
  - Standardized inspection procedures

#### Notes

- They wanted this project to generate statistically valid data and eliminate bias in the sampling.
- The sample size was chosen by a statistician: 131 platers were needed, so they inspected 135.
- · Only 128 were actually doing plating.
- Inspections were done in calendar year 2000 over a nine week period.

#### **Outcomes Category**

(Effects on Behavior of Regulated Populations)

#2 Level of Compliance in Regulated Population (Inspections Conducted in CY 2000)

- 9% with direct excess emissions violations
- ■38% with emission-related violations
- ■70% with non-emission related violations
- ■77% violated chrome plating rule

#### Notes

#### **Outputs Category**

(Enforcement & Compliance Assurance Activities)

#3 Notices Issued & Enforcement Actions Initiated (First Phase of Inspections Conducted CY 2000)

- Notices to Comply Issued (88)
- Notices of Violation Issued (25)
- Penalties Collected (\$202,000)

- 99 facilities violated at least one provision of South Coast regulation.
- District issued 88 notices to comply and 25 notices of violation
- Baseline inspection findings were somewhat distressing.

#### **Outcomes Category**

(Effects on Behavior of Regulated Population)

#4 Response of Significant Violators

- Most facilities achieved compliance with emission control requirements within a very short time
- Facilities that could not achieve immediate compliance applied for a variance or were issued an Order of Abatement

#### Notes

#### Action Items for Compliance Improvement

- **⇒** Based on problems discovered during the baseline inspections
  - ■Update permits
  - ■Improve Inspection Frequency
  - ■Develop recordkeeping forms
  - Develop Training Material
  - ■Administer Training

#### Notes

#### Compliance Assistance & Training

- ⇒ Compliance Assistance
  - ■Handbooks (English & Spanish)
  - ■Recordkeeping Forms
- ⇒ Training Classes
  - ■Three free classes held at the SCAQMD in December 2002 & February 2003
  - ■Facilities were sent flyers and called

- Many operators speak Spanish, so we developed recordkeeping forms and training handbooks in Spanish.
- These materials are available for interested parties.

# Chrome Plating Training Statistics

⇒ Total Facilities Inspected	128
⇒ Facilities Issued NOVs/NTCs	25
Attended Class	9
⇒ Facilities Issued NTCs only	74
<ul><li>Attended Class</li></ul>	21
⇒ Facilities In Full Compliance	29
<ul><li>Attended Class</li></ul>	10
⇒ Total Facilities Attending Class	40

#### Notes

- Out of 25 facilities issued NOVs, 9 attended the class.
- Out of 74 facilities issued NTCs, 21 attended the class.
- Out of 29 facilities in full compliance, 10 attended class.
- So, compliance status did not entirely influence attendance.

#### **Outputs Category**

(Enforcement & Compliance Assurance Activities)

#3 Notices Issued & Enforcement Actions Initiated (Second Phase of Inspections Conducted March 2003)

- Facilities In Full Compliance 95
- Notices to Comply Issued 15 ■ Notices of Violation Issued 1

#### Notes

#### **Outcomes Category**

(Effects on Behavior of Regulated Population)

#5 Long Term Response of Significant Violators
(Second Phase of Inspections Conducted March 2003)

- ➤ Of the 25 facilities that received NOVs in 2000:
  - ■21 facilities were in full compliance
  - ■2 facilities received NTCs
  - ■1 facility received an NOV
  - ■1 facility shut down
- ➤ Five percent of violators had new or recurrent significant violations within 2 years of receiving previous enforcement action

- Second phase of inspections: The follow-up results attained in the second round of inspections were very encouraging - we found good results in various outcomes categories.
- Comparison between 2000 and 2003 data showed good progress.

Outcomes Category (Effects on Behavior of Regulated Population)

#6 Environmental Improvements as Evidenced by Higher Compliance Rates

Data Points	2000	2003
Facilities Inspected	128	118
Facilities In Full Compliance	23%	80%
NTCs Issued	88	15
NOVs Issued	25	1

# Notes

#### Lessons Learned

Inspection Frequency Works

**Outreach Works** 

Vigorous Enforcement - When Needed

#### Notes

- Lessons learned: Compliance Assistance was not limited to one method.
- We used many "tools from our toolbox."

#### **Problems**

- ⇒ Study Is Resource Intensive
- ⇒ Requires Coordination
- ⇒ Not suitable for source categories with very small population
- ⇒ Not all facilities were receptive to training

#### **Applicability**

- Model applicable to other area sources, examples:
  - ■Gas Stations
  - Dry Cleaners
- ⇒ Enhance value by doing multi media?

#### **Questions and Answers**

- Q: How did you determine your universe?
- A: South Coast AQMD provided a list of all chrome platers in the District.
- Q: Was each facility permitted individually or were general permits used?
- A: Each facility has operating permits for each tank or plating line
- Q: What's the difference between NOVs and NTCs?
- A: NOVs are issued for more serious emission-related violations and NTCs are issued for administrative or procedural violations.

#### Questions and Answers

- Q: Did you inspect the same group of platers in the first and second round of inspections?
- A: Yes. We inspected 128 in the first round and 118 in the second round; ten facilities were out of business
- Q: How much time did it take to inspect each facility?
- · A: About 2 hours per facility.
- Q: What is the inspection frequency?
- A: SC was inspecting chrome platers every 2 years. They now inspect them every year

#### **Questions and Answers**

- Q: What would you do differently?
- A: Nothing really. Streamlining the regulations would help with record-keeping and language problems.
- Q: One slide mentioned exposure risk who was it that was exposed?
- A: The largest risk is to the nearest neighbors. OSHA regulates the exposure levels inside the facilities, but emissions can be so high that toxic air contaminants are an issue to neighbors as well.
- Q: How many permits were updated in the process?
- A: Most of the permits were updated since 2000.

#### **Questions and Answers**

- Q: The measures showed the difference in requirements being met.
   Did you look at whether the requirements did any good?
- A: We assumed that the requirements minimized exposure and addressed the exposure problem.
- Q: Did your results differ from those of SCAQMD's inspections?
- A: Our results showed similar non-compliance problems. Small facilities tend to have record-keeping problems if they aren't inspected every year.

#### **Questions and Answers**

- Q: Did you give facilities any other incentive than fear of enforcement?
- A: There is no other incentive. They know the fines can be high.
- Q: Do you have any sense as to how the compliance assistance tools contributed to compliance rates?
- A: We do not have data on the direct connection between the outreach method and change in compliance rates. Compliance rates among the 40 facilities who attended the training class was about 10% higher than overall group, but those attending the class have a better compliance attitude.





#### New Hampshire's Compliance Measures Project

Nancy Leland New Hampshire Department of Environmental Services





#### **Abstract**

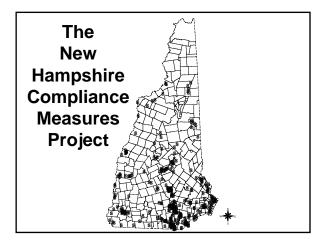
#### **New Hampshire Compliance Measures Project**

Historically, environmental regulatory agencies have relied on "output" (activity-based) measures to assess compliance. Such measures fail to capture the full range of an agency's compliance assurance activities and reflect little about the effectiveness of such efforts or about rates of compliance in the regulated community. To address this problem, the US Environmental Protection Agency ("EPA") Office of Enforcement and Compliance Assurance and the NH Department of Environmental Services ("DES"), have worked to develop RCRA program-specific "outcome" measures to create a more complete picture of agency performance.

The entire project was conducted in two phases. Phase I consisted of a review of the existing RCRIS database to determine its usefulness in analyzing compliance rates and trends. Phase II consisted of compliance surveys, data analysis, and restructuring of the data collection process within the DES Waste Management Division Hazardous Waste Compliance Section ("Compliance Section"). Two main conclusions of the study are 1) there are significant differences in behavior between NH FQGs and NH SQGs and 2) key outcome measures include inspections, waste characterization and periodic assessments.

In addition, the following findings and accomplishments resulted from the project

- ➤ 10% of the regulated community was visited,
- ➤ Partnering with a trade association (New Hampshire Auto Dealers Association) to ensure compliance is underway,
- ➤ 18% of the database was inactivated,
- ➤ 5% of the NH SQGs (CESQGs) visited generated wastes at higher levels than notified,
- ➤ The overall compliance rate for the state is 65%,
- > The highest compliance rates are for aisle space and waste characterization,
- The lowest compliance rates are for training and emergency postings,
- Personal Digital Assistants (PDAs) will facilitate the collection and processing of inspection information,
- An automated system now exists to capture all inspection information, and
- Approximately 32.5 work-hours/inspection and 40 work-hours/program summary report will be saved because of this project.



#### Notes

Presented by: Nancy Leland and Chris Simmers

#### Goal: To develop RCRA programspecific outcome measures

#### Phase I: Review of historical RCRIS compliance data (Tetra Tech)

- data not collected randomly, not comparable
- RCRIS violation codes too broad for state specific program measures

#### Notes

- This project has been so successful, they're looking at institutionalizing the work.
- Phase 1 involved looking at historical data.
- Historical data was not useful. [see slide]

# RCRA program-specific outcome measures

#### Phase II: Gather future compliance data

- conduct scientific study of generator behavior for statistical analysis (baseline, trends, sig. differences)
- key behaviors used as compliance measures
- automated reporting/data management system (Oracle) and PDA based container inventories

- During Phase 2 we changed our focus.
- We will be using PDAs in the field to save time doing the data collection.

# Background information on NH Generators

Classification System:

NH FQG = Fed LQG + Fed SQG

NH SQG = Fed CESQG

#### Notes

- New Hampshire has its own classification system for hazardous waste.
- This presentation covers both NH and federal data.

#### Data gathering for baseline

#### Who?

4,577 active generators after data clean-up

#### Where?

Random generators throughout state

#### How?

Multidisciplinary workgroup Partial Compliance Evaluation 3 Summer interns

#### Notes

 Partial compliance evaluation was comprised of a 10-question survey designed to take no longer than 45 minutes.

#### ...data gathering

#### How many needed?

Variance from historical inspection data Minimum "n" at 90% confidence level=60 429 Sites visited, 184 sites in final data set

71 NH FQGs (21 LQGs + 50 SQGs) 113 NH SQG's (113 SQGs)

#### Notes

 They needed to get out to a minimum of 60 facilities, and ended up with 184 sites.

#### **Partial Compliance Evaluation**

#### 7 Indicators of Compliance

- Training
- ■2' Aisle space
- Inspections
- Closed/Condition
- "Haz. Waste" Labels
- ■Emergency postings

# Haz. Waste Unknowns3 Surrogate Indicators

- Toxicity reduction-P2
- Periodic assessments-ISO
- Good housekeeping

#### Notes

 Partial compliance evaluation included 7 indicators of compliance related to NH's hazardous waste rules.
 We also included some surrogate indicators.

### Statistical analyses 2002 data set

- Frequency distributions€
- T-tests€
- Factor analysis€
- Linear regression analysis€

#### **Future efforts**

- ■Trend Analysis
- Analysis of Variance

#### Notes

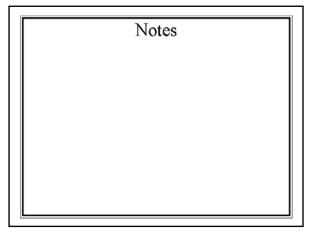
#### Questions to be answered:

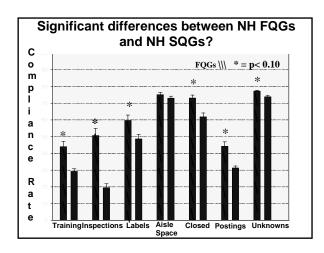
- Are there significant differences in compliance rates for NH FQGs and NH SQGs?
- What is the baseline compliance rate for generators in the state?
- What are the compliance rates for each type of violation?

- Results looking at comparison between NH FQGs and NH SQGs found there was a significant difference in behavior for 6 of the indicators.
- There are specific requirements for SQGs regarding extended storage, but many don't even know they're required to meet any extra requirements. We need to identify and assist these facilities.
- Baseline compliance of 65% was considered to be "failing."
- Initiated a new FQG survey program in the state; the generators think their compliance is around 90%!
- Looking forward to working with them to close this gap between perception and reality.

#### Questions to be answered:

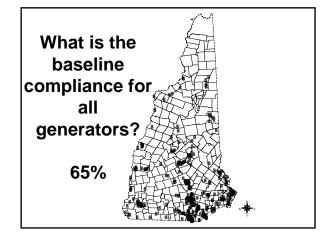
- Are there key violations that can be used as compliance measures?
- What is the relative distribution of violations?
- What percentage of generators are improperly notified?



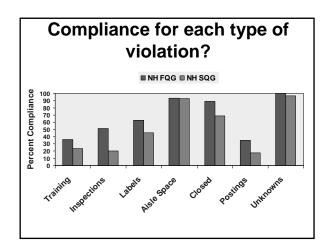


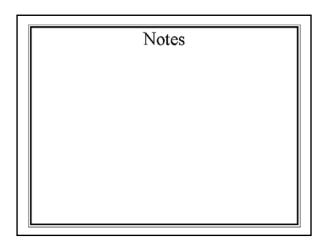
#### Notes

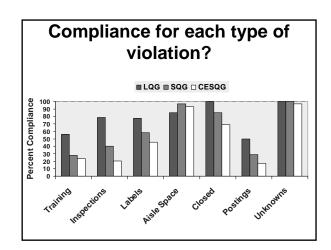
- This slide shows the difference between the 2 groups.
- We can tell if there is a statistically significant difference between NH FQG and NH SQG, but not between LQG, SQG and CESQG because of limits in the data set. Next year we will be able to.

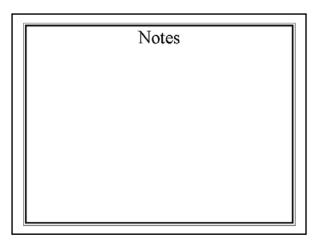


Notes



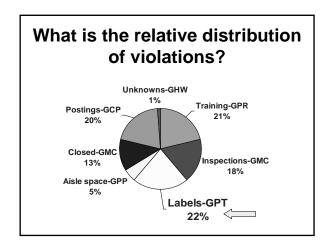


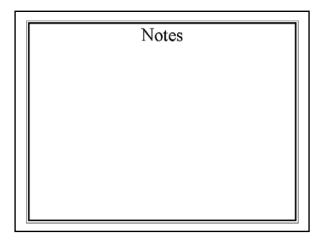


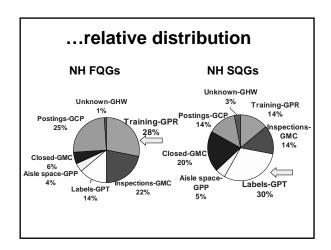


key violations to use as compliance measures?					
Violation type	RCRIS Code	Factor 1	Factor 2		
Inspections	GMC	0.883	-0.005		
Training	GPR	0.832	0.129		
Labeling	GPT	0.704	0.236		
Emergency Post.	GCP	0.646	-0.231		
Closed/condition	GMC	0.503	0.579		
Unknowns	GHW	0.076	0.84		
Aisle space	GPP	-0.079	0.809		

• Regarding key violations to focus on, we should focus on inspections and "unknowns" if we need to go into a facility quickly.







# Regarding the relative distribution of violations, labeling showed the highest rate of violations for SQGs. Training showed the highest rate of violations for FQGs.

# What percentage of generators were improperly notified? Notified as: Actually were: Percent: NH FQG NH SQG 15% Declassified 9% NH SQG NH FQG 5% Declassified 10%

• 5% of SQGs were actually FQGs, yet SQGs are not currently the highest priority for inspections. Need to screen SQG database to find the 5% that may be generating at higher levels than notified.

Notes

#### **Major accomplishments:**

- √10% of the regulated community was visited:
  - 429 visited in 3 months vs. 306 inspected in 10 years
- ✓ Compliance Measures System (CMS) online for 10/01/03:automated inspection reports and data management system
- √ PDAs will facilitate collection of data

#### Notes

- Interesting finding: Auto dealers have 15% of their SQGs generating at FQG levels.
- We were able to evaluate 10% of the regulated community, which was really good for us. We typically do only 1% of the total facilities.
- We also have a new automated on-line system for inspections and data management.

#### ...accomplishments

- √ Partnering with trade association (NHADA): semi annual compliance audits with members (500+), multimedia issues including floor drains
- √ 15% of the database was inactivated

#### Notes

- We partnered with a trade association who hired a health and safety specialist to do audits.
- This specialist was trained by the state.
- We expect him to be able to make a significant difference through compliance assistance. Because of our work, we will be able to confirm if he does.

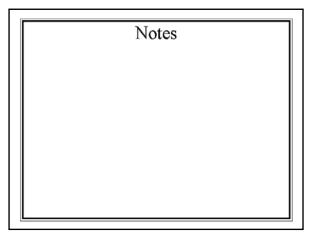
#### **Major findings:**

- √ Significant differences in behavior between NH FQGs and NH SQGs
- √ Highest compliance rates for aisle space and unknowns
- √ Lowest compliance rates for training and emergency postings

Notes

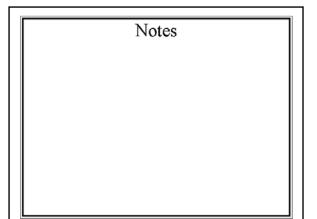
#### ...findings

- √ Key violations for compliance measures include inspections and unknowns
- √ Overall compliance rate is 65%
- √5% of NH SQGs generated wastes at higher levels than notified



# Total Project Costs Summer 2002 = \$160,000

Item	Federal	State
Personnel		
-Programmer	\$53,000	
-Interns	\$12,000	
-Phase I consultant	\$15,000	
-DES staff		\$66,000
Travel	\$3,000	
Other	\$11,000	
Total	\$94,000	\$66,000



#### **Projected costs-Summer 2003**

Item	State	Federal
Personnel		
-Programmer	\$24,000	
-Interns		\$16,000
-DES staff	\$24,000	\$5,000
Travel	\$2,000	\$1,000
Other,PDAs	\$5,000	
Total	\$55,000	\$22,000

Notes

• We're doing re-visits again this summer with interns for \$77K.

#### Applying what we learned:

#### The importance of a scientific study of behavior:

- ✓ Significant changes in behavior due to DES programs (FQG Certification)?
- ✓ Different program objectives for generators
- √ Trends in compliance rates

#### Using key compliance measures:

- √ Measures justify use of partial inspections
- ✓ Can direct SQG Self-Certification audits

#### Notes

- It is important to have a scientific method. We want defensible program objectives.
- One of the integral questions we need to answer is, "Can we have key compliance measures that can be used to determine compliance quickly when you go into a facility?".

#### Applying what we learned:

#### Using evaluation and inspection data sets:

- √ Evaluations as useful as inspections (beans)?
- ✓ Evaluations count as Compliance Assistance Visits (CAVs) in WIN/INFORMED

#### Notes

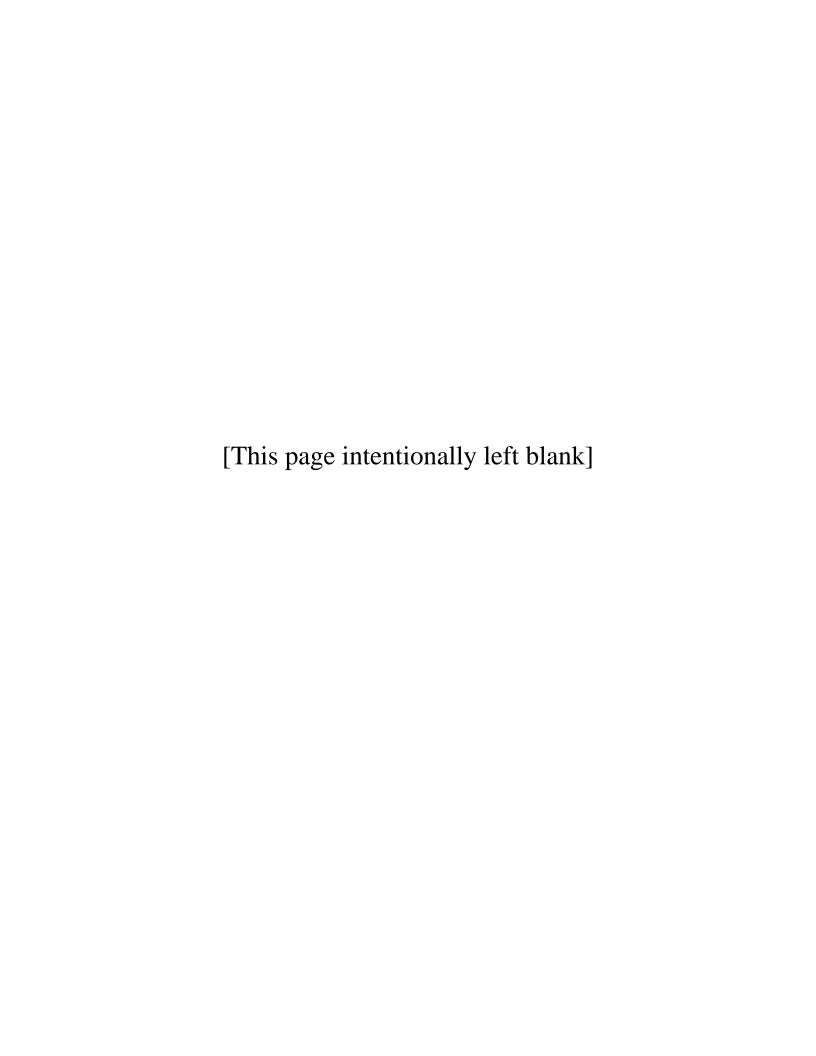
 Want to talk to Headquarters about how to utilize evaluations as compliance assistance visits and/or focused compliance inspections and get credit (beans).

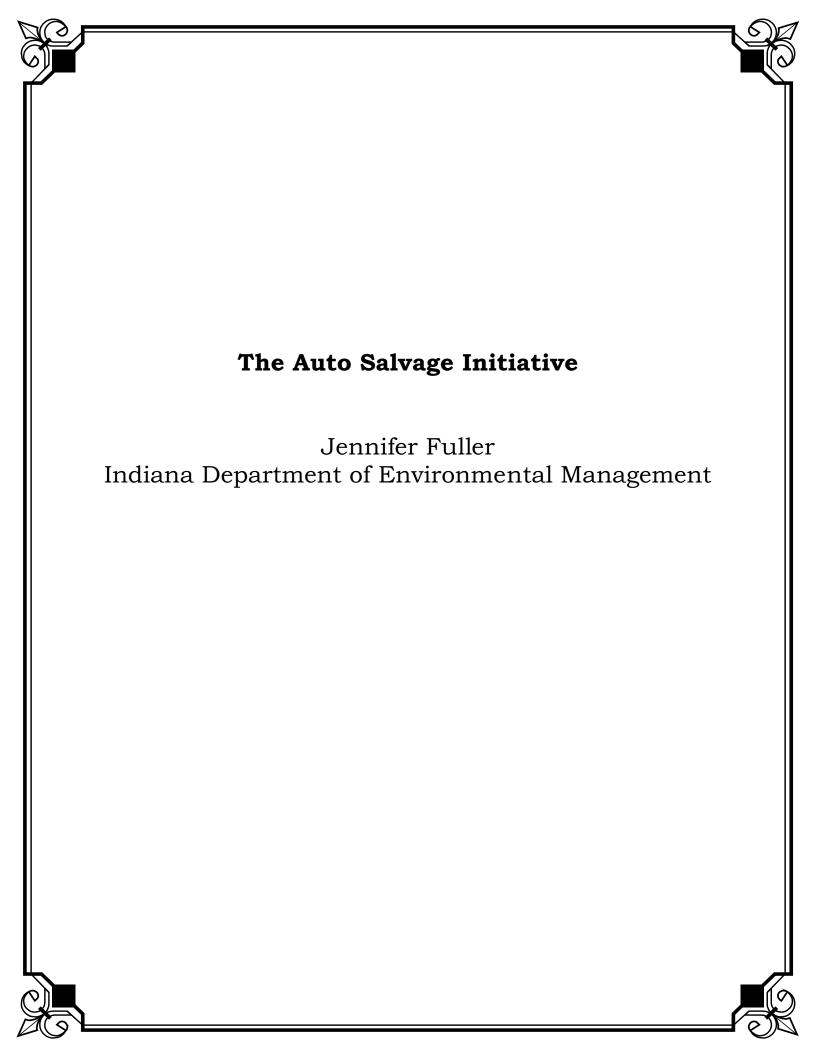
#### Questions and Answers

- Q: Can you talk briefly about changes that are expected?
- A: We are dealing with creating a baseline. We will be doing training and follow up evaluations to see if there is a significant increase in compliance.
- Q: If they did more inspections and did more technical assistance, what did they have to cut back on, resource-wise?
- A: We didn't have to cut back because all of the evaluations were done by summer interns. But the back end work was a lot for staff. We didn't cut back, just got busier!

#### **Ouestions and Answers**

- Q: Did you see a change in compliance because of your work with the trade association?
- A: We did not work with them until the end of the project. Now we will be able to see any changes because they're doing these activities now.
- Q: Did you do any follow-up enforcement?
- A: No, and that's a problem because they can't consider it a 'bean."
- Q: Are they going back out to visit the 10% that were visited in Summer 2002?
- A: We will be re-evaluating a random selection again during the Summer 2003, and there are some facilities that will be evaluated again.





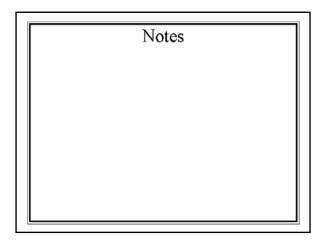
#### **IN DEMs Auto Salvage Facility Sector Project**

In response to significant compliance issues associated with the auto salvage facility sector, the Indiana Department of Environmental Management has undertaken a four-year program aimed at increasing the compliance rate of auto salvage facilities across Indiana. This project, which started in August 2000 and will conclude in August 2004 involves a unique sector-based approach to compliance in the form of a "compliance continuum." This approach starts with compliance assistance efforts in the form of a compliance assistance manual written specifically for the auto salvage facility sector and outreach workshops, and concludes with an inspection/enforcement phase. Included in the inspection/enforcement phase will be an effort to address past mismanagement of wastes resulting in on-site contamination.

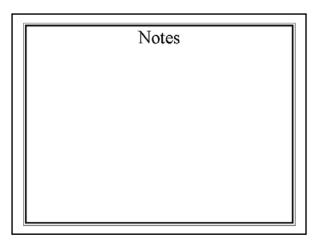
As noted above, the compliance assistance phase of this project specifically involves the development and distribution of a compliance assistance manual and outreach workshops. The workshops, which will use the manual as an outline, will cover numerous topics including: making a hazardous waste determination, determining generator status, cleanup of contaminated areas, and a facility owner's responsibilities under Indiana's Rule 6 storm water program. Scheduled as presenters is staff from IDEM, the Indiana Bureau of Motor Vehicles, the Indiana Department of Labor/Bureau of Safety Education and Training and the Indiana State Department of Health/Radiologic Health Section. The focus of these workshops will be the proper management of wastes and the numerous recycling and reclamation opportunities available to auto salvage facilities. Particular emphasis will be placed on the benefits of recycling and/or reclaiming waste fluids, as well as the removal of mercury switches prior to performing crushing activities.

A Web site for the project can be found at <a href="www.IN.gov/idem/autosalvage">www.IN.gov/idem/autosalvage</a>. This comprehensive site contains a wide variety of information including: a database containing the location of auto salvage facilities located in Indiana; a downloadable version of the compliance assistance manual; a listing of the ten outreach workshops to be held across the state in Spring, 2003; and links to various IDEM guidance documents, as well as other information outside of IDEM that is applicable to this sector.

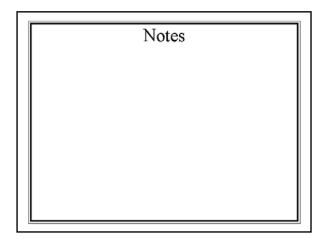




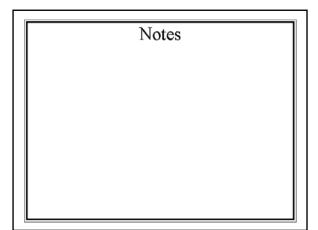




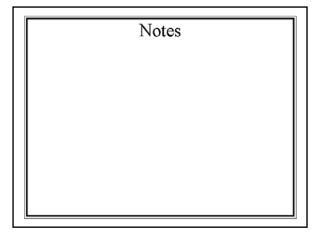














#### History of the project

- In an effort to increase agency wide efficiency, it was proposed that a portable prototype model for sector based activities be developed.
- This prototype model is a continuum, beginning with universe identification and ending with environmental indicators that will evaluate the impact of the prototype model.
- The auto salvage industry was chosen to be the first focus sector.

#### Notes

- Project is not completed yet; we are currently in the third year.
- We are using a sector-based approach.
- Auto salvage was selected because they have a 3-4% compliance rate. Inspections were not occurring.



#### **Project Goals**

- Development of a reproducible project prototype model continuum.
- To achieve the reproducible model, internal staff was utilized to create a workgroup. This workgroup is responsible for generating project products.

Notes



#### **Project Products**

- Universe establishment
- Establishment of a complete and accurate database for both internal and public use
- Using stakeholder input, develop an easy to read and all inclusive manual specific to the auto salvage industry
- Compliance Assistance Outreach Efforts
- Inspection Efforts
- Enforcement Efforts

#### Notes

- Initial universe was created from the Bureau of Motor Vehicles
- Found 1100 known facilities and many others who were "flying under the radar."

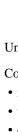


#### Sector Specific Goals

- Increase compliance rates of facilities in this sector
- Address fluids management issues that have resulted in potential historical and ongoing contamination
- Encourage recycling and use of Best Management Practices in order to prevent future contamination

#### Notes

 Trying to encourage facilities to do well by using best management practices (BMPs).



#### Major Project Phases

- Universe definition & database development
- Compliance assistance
  - manual
  - workshops
  - on-site visits
- Random inspections using various targeting tools
- Enforcement (where appropriate)

#### Notes

- · First phase is completed.
- Compliance Assistance (CA) workshops are happening now.
- Manual is in the production stage
- To chose the random inspection sites we used GIS to map the facilities with attributes that designated areas with possible environmental justice issues, along with other factors.



#### Results & Outcomes

#### Notes



# What's been accomplished to date

- Universe identification complete
- Stakeholder meetings are complete
- Marked increase in number of NOI
- (Notice of Intent) submittals has been seen, even before workshops started!
- Compliance Manual is currently in the printing process

#### Notes

- In this sector, the good players want the bad players on board, so that helps encourage compliance.
- Only the "cream of the crop," those facilities using good storm water practices, came to the stakeholder meetings.
- We learned they need plain language explanations of generator status and we wrote the materials for the manual accordingly.
- Audit checklist is written in very simple terms now, and should be effective and helpful to identify problems.
- · We have seen increase in NOIs based only on word of mouth.

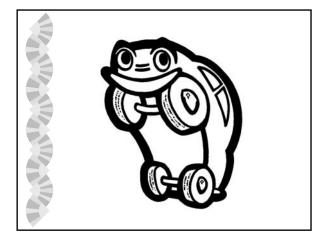


# What's been accomplished to date, continued

- Compliance Assistance Workshops have begun
- Database (CARS) development is complete.
   The Web site for the project pulls information from the database in real time for public and internal use. Features the project mascot, Otto!

#### Notes

- CARS website (aptly named) allows the state of Indiana to see all applicable facilities.
- Helps state agencies identify missing facilities identified by the public or other agencies
- Web site includes calendar, regulatory updates, and other things as well.



#### Notes

Our mascot

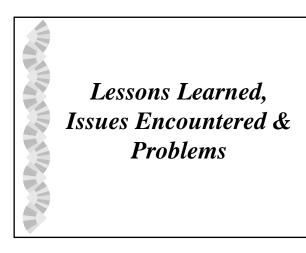


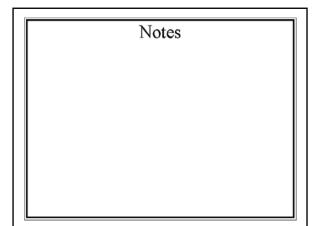
# Anticipated implementation timeframe for major phases

- Targeted inspections July through December, 2003 (may be extended)
- Possible Compliance Assistance Round II
- Enforcement July 2003 through (?)

#### Notes

- We only have 2 or 3 part-time inspectors.
- Expect to have a compliance assistance aspect to the project as a part of Round 2.
- We will also be trying to tackle enforcement issues.





#### Lessons Learned

- When IT says it will take a year to get a database up and running, believe them!
- 4 year grant terms are very beneficial!
- Creating a manual is incredibly time consuming and difficult!
- Inter-agency and coordination is a BEAUTIFUL thing!

#### Notes

### Issues Encountered

- Took quite a bit of time for money to be conveyed from EPA to IDEM and then for IDEM to set up an internal fund center.
- Internal workgroup participation could have been enhanced. It was limited at times by participant's interest & heavy workloads...in the end all goals were met, however.

- Also, we are concerned about people closing up shop and walking away and thus creating brownfields.
- Currently, we are working with other states to deal with this possibility.

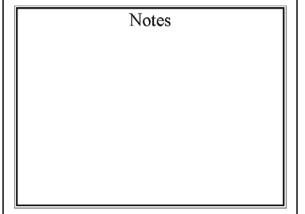


#### Can project be shared?

 Absolutely! Much can be learned about the project by visiting the project Web site at: www.in.gov/idem/autosalvage OR by visiting Dave's baby, the OECA/STAG Web site at:

www.otis.abtassoc.com/grants/index.html

- Feel free to call Pam or I at any time
- Several states (FL, WI, MI, MN, WA & OH) were invaluable during project startup.





#### IDEM Auto Salvage Facility Sector Project Contacts & Project Web site

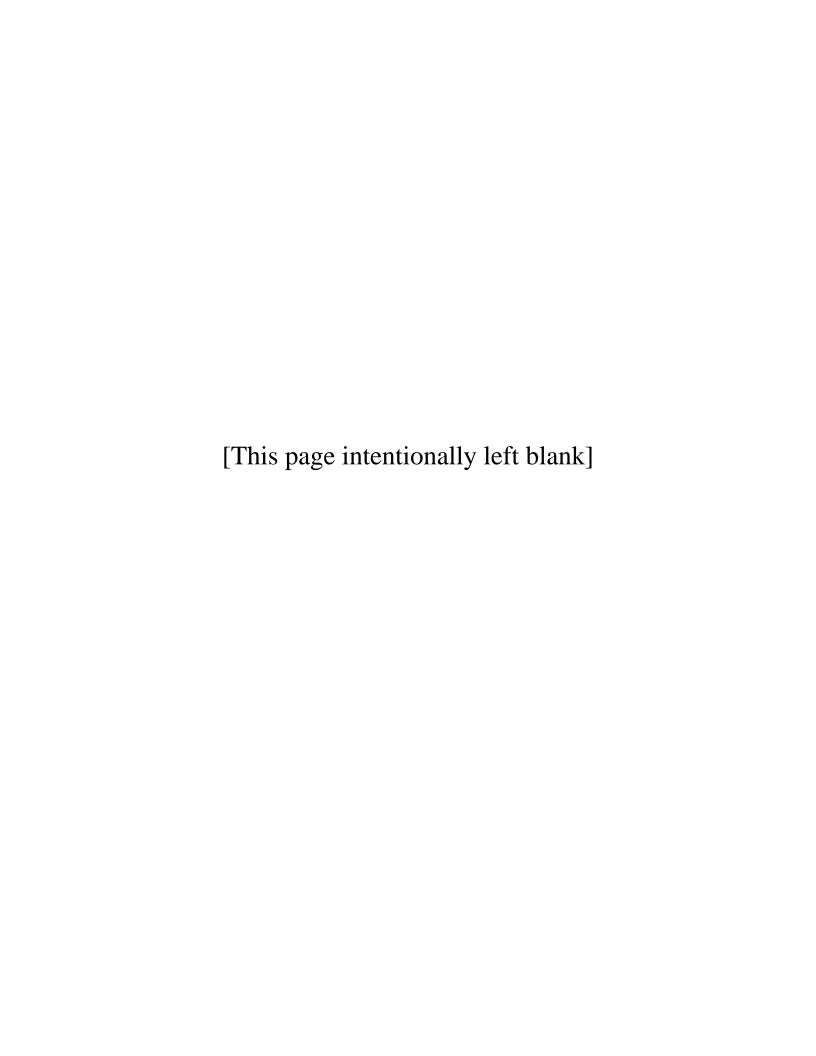
- Jennifer Fuller; (317) 233-2370; jfuller@dem.state.in.us
- Pam O'Rourke; (317) 232-4464; porourke@dem.state.in.us
- www.in.gov/idem/autosalvage

#### Questions and Answers

- Q: Does the auto salvage sector include places that service the public for scrap parts?
- A: Yes. Not scrap recyclers and metal per se, but can be.
- Q: How have you dealt with the issue of people not having been inspected, and now having to do cleanup?
- A: We think that after the inspection phase, we will have another
  compliance assistance phase. Unfortunately, we do not have cleanup
  funds available through this grant. Hopefully the state folks will get
  involved. We will probably inspect 50-60 facilities, probably the
  worst players, so prioritizing for cleanup will come from them.

#### Questions and Answers

- Q: As follow-up, are you going to tell them what to do with their limited funds?
- A: No, we're not, but enforcement people may.
- Q: Are they going to need a search warrant to get on site?
- A: It's possible. The State police have expressed interest in participating as well.
- Q: Are there any pools of money to assist with cleanups?
- A: Currently, there are not. We are still very concerned about the possibility of a lot of abandoned sites.







# Program Planning and Performance Measurement Initiative

Sherry Driber New Jersey Department of Environmental Protection



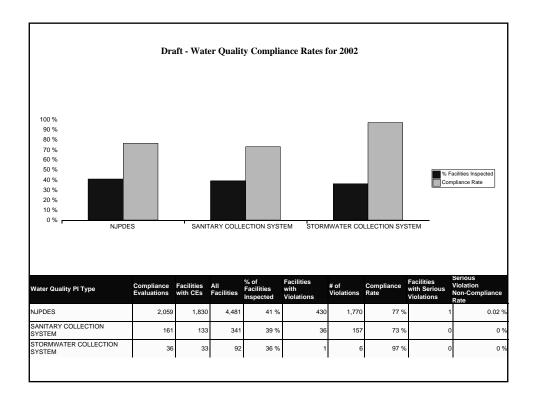


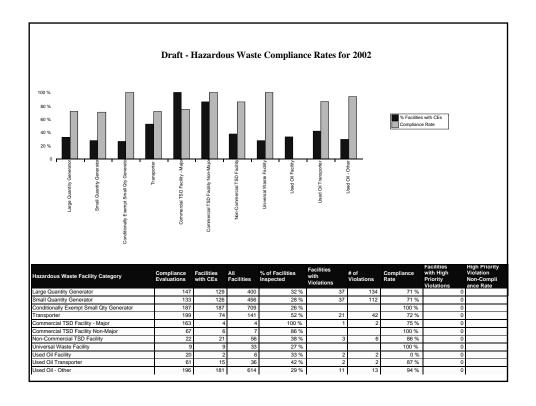
#### New Jersey DEP and OECA STAG Program Planning and Performance Measurement Initiative

The New Jersey Department of Environmental Protection (NJDEP), Compliance & Enforcement wants to focus on results-based resource allocation and targeting. NJDEP has been collecting multimedia inspection, violation and enforcement action data in a facility based, department-wide integrated database, called the New Jersey Environmental Management System (NJEMS) since 1999. For this initiative we will use NJEMS data to evaluate where we are investing our resources and the results those resources are producing. We will use that information to determine appropriate shifts in priorities and develop new targeting strategies. We will do this analysis for the five media that have at least one year of data available in NJEMS: Air, Water Quality, Water Supply, Hazardous Waste, and Solid Waste.

In addition to NJEMS data, NJDEP needs some basic facility information such as SIC, NAIC, number of employees, etc to evaluate past results and determine new targeting strategies. NJDEP also needs to identify facilities it doesn't know exists. As part of this project we will obtain a complete set of all Dun & Bradstreet facility information in New Jersey. Additionally Dun & Bradstreet will match facilities in NJEMS to their data, creating one large database we will use for this project.

We will use this complete set of data to evaluate at least one full year of past inspection data, focusing primarily on compliance rate, using a chart developed by the Environmental Compliance Consortium. We will add to this chart, data relevant to each media, such as facility type, facility size, number of employees, SIC, etc... that will help to better evaluate our effectiveness. We will use the compliance rate data as a baseline for performance measurement. We will develop new targeting strategies based on this information and perform inspections based on the new strategies. We will then generate the same set of compliance rate data, post inspection, to determine targeting success. If this method of determining new inspection targets is effective, we will use the lessons learned and report development techniques to determine appropriate targeting strategies for other media.





Sherry Driber, NJ DEP 1

**Draft - Air Compliance Rates by SIC for 2002** 

#### Manufacturing

SIC Description	Inspections	Facilities Inspected	Facilities in Sector	% Facilities Inspected	with	Violations	Compliance Rate	High Priority	Complianc
Food and kindred	173	55	196	28 %	21	66	62 %	3	5 %
Tobacco manufact	0	0	0		0	0			
Textile mill product	55	17	80	21 %	6	16	65 %		
Apparel and other	4	3	26	12 %	2	3	33 %		
Lumber and wood	18	15	94	16 %	4	7	73 %		
Furniture and fixtu	15	7	57	12 %	3	9	57 %		
Paper and allied p	134	49	126	39 %	13	60	73 %	1	2 %
Printing and publis	193	66	152	43 %	20	44	70 %	1	2 %
Chemicals and alli	755	197	563	35 %	52	271	74 %	3	2 %
Petroleum and coa	411	33	85	39 %	14	159	58 %	6	18 %
Rubber and misce	104	53	204	26 %	19	88	64 %		
Leather and leathe	10	3	6	50 %	0	0	100 %		
Stone, clay, glass,	122	50	204	25 %	19	66	62 %	1	2 %
Primary metal indu	166	47	123	38 %	19	80	60 %	2	4 %
-,-,								l	

Sherry Driber, NJ DEP 2

#### **Sherry Driber, NJ DEP**

"Program Planning and Performance Measurement Initiative"

#### **Questions and Answers**

Q: Is the targeting effort running into problems with other priorities?

A: The programs and upper management are committed to inspecting the targets they select.

Q: Does the system allow you to drill down, say, to see what the 6 violations were?

A: Yes. NJDEP stores violation-specific information in NJEMS, right down to the citation

Q: Does your management expect to see compliance concerns based on particular facility characteristics?

A: The expectation is that looking at performance measurement data this way will help to give a better picture of compliance concerns. NJ is not currently collecting facility characteristic information consistently across programs, so we don't know what to expect. Also, part of this project is to display the report information through GIS to evaluate compliance rates not just by facility characteristic but also by geographic area. For example, New Jersey had a drought problem last year. Displaying facilities with water withdrawn exceedances geographically may point to a geographic area of concern. Q: How will D&B match their facilities to yours? Has the TEMPO system tackled the unique facility identifier problem?

A: It lets each program have its own facility identifier but uses a single identifier based on geographic location to link all the separate identifiers as one.